

Abstract

Process and device for the parallel preparation of at least  
4n oligonucleotides

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In a process and a device for the parallel preparation of at least 4n oligonucleotides, at least four inserts each with n reaction vessels are first arranged on a plate (16), each reaction vessel containing a nucleotide initiator base  
10 bound to an inert carrier. Particular operations are then carried out in parallel with one another at four stations (28, 30, 32, 34), and in particular a deblocking operation simultaneously in all n reaction vessels of the insert at the first station (28), a first washing operation  
15 simultaneously in all n reaction vessels of the insert at the second station (30), a coupling operation in all n reaction vessels of the insert at the third station (32), and, simultaneously in all n reaction vessels of the insert at the fourth station (34), a second washing operation  
20 followed by a capping operation followed by a third washing operation followed by an oxidation operation followed by a fourth washing operation. The plate (16) with the inserts is rotated station by station, the abovementioned operations being carried out, until the desired  
25 oligonucleotides have been formed by coupling individual nucleotides to one another.

(Fig. 1)